

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
13 January 2005 (13.01.2005)

PCT

(10) International Publication Number
WO 2005/002326 A2

(51) International Patent Classification⁷:**A01H**

(74) Agents: SALE, Terri, L. et al.; Exelixis, Inc., P.O. Box 511, 170 Harbor Way, South San Francisco, California 94083-0511 (US).

(21) International Application Number:

PCT/US2004/020323

(22) International Filing Date: 23 June 2004 (23.06.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/482,075 24 June 2003 (24.06.2003) US

(71) Applicant (for all designated States except US): AGRONOMICS LLC [US/US]; 16160 S.W. Upper Boones Ferry Road, Portland, Oregon 97224-7744 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ANDERSON, Catherine [US/US]; 132 Wicklow Lane, Durham, North Carolina 27713 (US). LEE, Stephen, Aaron [US/US]; 1405 N. Gregson Street, Durham, North Carolina 27701 (US). POWELL, Kerrie [US/US]; 1204 Grandover Drive, Durham, North Carolina 27713 (US). PUENTE, Pilar [ES/US]; 6 Briarwick Court, Durham, North Carolina 27713 (US). RHEIN, Jennifer, Lee [US/US]; P.O. Box 5232, Raleigh, North Carolina 27650 (US). TIMMONS, Philip, Reid [US/US]; 4423 Dula Street, Durham, North Carolina 27705 (US). WINGATE, Vincent, Paul, Mary [US/US]; 613 Churchill Drive, Chapel Hill, North Carolina 27514 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/002326 A2

(54) Title: GENERATION OF PLANTS WITH IMPROVED DROUGHT TOLERANCE

(57) Abstract: The present invention is directed to plants that display a drought tolerance phenotype due to altered expression of a DROS nucleic acid. The invention is further directed to methods of generating plants with a drought tolerance phenotype.